EXECUTIVE OFFICER HEARING

STATE OF CALIFORNIA

AIR RESOURCES BOARD

JOE SERNA, JR. BUILDING

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

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2:00 P.M.

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APPEARANCES

STAFF

Mr. James Goldstene, Executive Officer

Mr. Richard Corey, Chief, Stationary Source Division

Mr. Bob Fletcher, Deputy Executive Officer

Mr. Bob Jenne, Assistant Chief Counsel

Mr. Mike Waugh, Staff

ALSO PRESENT

Louie Brown, National Biodiesel Board

Jim Lyons, POET, LLC

Steve Unnasch, Life Cycle Associates

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PROCEEDINGS

EXECUTIVE OFFICER GOLDSTENE: Good afternoon, and welcome. I'm James Goldstene, Executive Officer of the Air Resources Board. The public hearing for Agenda Item EO 11-1-1 will now come to order.

First, a couple of routine announcements. Anyone who wishes to testify on this item must sign up with the Clerk of the Board. There are speaker cards both outside the room and at the Clerk's desk over here on your right.

In the event of an emergency, we must evacuate the room immediately and go downstairs and out of the building and assemble at Cesar Chavez Park across the street. The emergency exits are at the rear of the room as well as to my right and left.

We'll now provide a little bit of background about why we are here today. The Board approved the low-carbon fuel standard at its hearing on April 23rd, 2009. A central feature of the LCFS regulation is the set of Lookup Tables which lists the fuel pathways for which carbon intensity values have been determined at the time of the rulemaking. Anticipating the need to account for innovations and advancements in the fuel pathways, the Board in Resolution 09-31 authorized and directed the Executive Officer to conduct public hearings to add new or modified fuel pathways into the Lookup Tables. Since the

changes to the Lookup Tables are technical in nature, the Board delegated to the Executive Officer the authority to adopt regulatory amendments to the Lookup Tables and to conduct public hearings and to take other appropriate actions to make such amendments. This delegation of authority allows the Executive Officer to conduct these activities on behalf of our Board.

Today's hearing is the first of such Executive Officer hearing. After staff makes its presentation today on the proposed amendments, I'll open the record for public testimony. Individuals on the list of commentors will be called upon to make their statements. Please be prepared to limit your comments to three minutes.

Also, if you've submitted written comments, you don't need to read your comments. Making oral comments will make your points heard clearly and quickly is always appreciated. And if I have questions, I'll follow up with questions.

I may allow more time for some comments if there are few commentors and others wish to have a discussion. I'll now call upon Wes Ingram of the Stationary Source Division to give staff's presentation on the proposed amendments. Wes, are you ready?

(Thereupon an overhead presentation was presented as follows.)

MR. INGRAM: Thank you, Mr. Goldstene.

The Low Carbon Fuel Standard regulation contains a Lookup Table listing all of the currently approved fuel pathways. A pathway is a comprehensive quantitative description of a well-to-wheels fuel production process which is summed up in the pathway carbon intensity. And I'll usually use the abbreviation "CI" to refer to a fuel carbon intensity.

Regulated parties may get carbon intensity scores for their fuels by one of two methods. The first, Method 1, allows them to use an appropriate carbon intensity from the Lookup Table. The second, Method 2, allows them to apply for a carbon intensity specific to the fuels they supply.

Method 2 is subdivided into two sub-methods: Method 2A and Method 2B. The Method 2A process is used for fuel production processes that are essentially variations on existing pathways, variations that result in significant CI improvements.

An example would be corn ethanol produced in highly efficient plants. The 2B process is reserved for entirely new fuels or for entirely new ways of producing existing fuels, producing a hydrocarbon fuel from solid waste, for example.

The Lookup Table also contains pathways developed

by ARB staff. Staff continues to develop new fuel pathways when they are deemed to be high priority. High priority will be defined in a subsequent slide.

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MR. INGRAM: Today, staff is asking the Executive Officer to consider the approval of 28 new LCFS fuel pathways. Twenty-five of these are Method 2A pathways -- 25 are Method 2 pathways, either 2A or 2B. Three are staff developed. The 25 Method 2 pathways are contained in six applications submitted by fuel providers. The three staff developed pathways are contained in two pathway documents. Collectively, these fuel pathways will incent the production of additional volumes of low carbon fuel for the California market. Additional pathways to be presented at subsequent hearings will continue this trend.

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MR. INGRAM: What you will see in the next series of slides is a summary of the key elements that describe each of the proposed fuel pathways. Please keep in mind that these slides were arranged by application rather than by pathway. The difference is that a single application can contain multiple pathways.

The key elements that will be presented for each pathway are the following:

First, the application type, whether it is a 2A

or 2B application.

Second, the reference pathway. Method 2A applications must be referenced to an existing pathway in the Lookup Table. A proposed 2A pathway, recall, is defined as a substantial improvement on an existing Lookup Table pathway.

Third, the type and location of the production plants covered.

Fourth, the number of pathways proposed in the application.

Fifth, the co-products produced. Two co-products occur in this group of applications: A livestock feed known as the distillers grains, or DGS, and glycerin.

Throughout this presentation, I will mention the dryness or the moisture content of the DGS produced. This is important because drying the product consumes additional energy and increases the CI.

The final descriptive element I will identify for each pathway is the proposed carbon intensity.

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MR. INGRAM: The first application I will discuss is a Method 2B application from Archer Daniels Midland Corporation. It covers a single plant located in Columbus, Nebraska. This is a dry mill corn ethanol plant with the following distinguishing characteristics:

It is powered by a cogeneration facility that produces thermal and electrical power from coal, natural gas, and biomass. Because all the energy needed to power the Columbus plant is produced by the cogen plant, no grid electricity is used. This plant will be operated in two modes: A pre- and a post-optimized mode. It will be in pre-optimized mode until a unit to capture and reuse the last increment of waste heat is installed and functioning. At that point, it will switch to the optimized mode. In general, sophisticated systems to capture and reuse waste heat help reduce this plant's carbon intensity.

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MR. INGRAM: ADMs apply for eight pathways. For each of the two operational modes discussed above, the plant will be powered using four combinations of process fuels. Each combination is comprised of varying proportions of coal, natural gas, and biomass. The Columbus plant produces distillers grains, or DGS, as a co-product. Some of this DGS is not dried. Some is partially dried. And some is fully dried. The CIs for these eight pathways range from 85.25 to 91 when the plant operates in a pre-optimized mode and 87.27 to 90.11 when it operates in the post-optimized mode.

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MR. INGRAM: This and the next two slides cover

Method 2A applications for what are known as cookie cutter plants. They are called this because they were all designed and built by ICM, a firm specializing in Midwestern ethanol plants. Most ICM designed plants exhibit strong similarities. These applications are all for natural gas powered dry mill plants and all share the same reference pathway, the pathway being the Midwest dry mill; dry DGS natural gas pathway. And CI in this pathway is 98.4 grams of carbon dioxide equivalent per mega joule.

Given this common background, I can cover these three applications fairly quick. The first is the Louis Dryfus plant which is located in Northfork, Nebraska. It produces both dry and partially dried DGS. Its proposed CI is 87.16.

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MR. INGRAM: The Green Plains Central City Plant is located in Central City, Nebraska. It produces partially dried DGS and its proposed CI is 84.29.

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MR. INGRAM: The Green Plains, Lakota plant is located in Green Plains, Iowa. It produces both wet and dry DGS. And its proposed CI is 91.6.

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MR. INGRAM: The next application I will cover is less straight forward. POET, LLC, has applied for eleven

pathways covering several Midwestern dry mill corn ethanol plants. These pathways are not plant specific. As its pathways are approved, POET will make use of the LCFS Biorefinery Registration process to associate specific plants with each approved pathway. POET's eleven pathways are grouped as follows:

For each of six production technologies, except one, both wet and dry DGS will be produced. Under one to six, only dry DGS will be produced. This gives us six production technologies times two DGS types, minus one, or eleven pathways.

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MR. INGRAM: The production technologies on which POET's pathways are based are combinations of the following six processes:

First, raw starch hydrolysis, which is the use of special enzymes to facilitate the conversion of starch to sugar and to ferment the sugar. These enzymes reduce heating needs.

Second, combined heat and power.

Third, the use of biomass fuel.

Fourth, the use of landfill gas.

Fifth, the conventional cook process, which is the more typical higher energy method of starch conversion.

And finally, corn fractionation. Under this process, feedstock corn is broken up into its constituent parts and only the corn starch enters the ethanol production process.

The CI's associated with POET's pathways range from 74.7 to 92.4 for the dry DGS pathways and 73.2 to 83.7 for the wet DGS pathways.

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MR. INGRAM: In this slide, we change feedstocks and depart from the Midwest to consider a Method 2B application for Brazilian sugar cane ethanol. Although the fuel covered by this application was produced in Brazil, the application itself covers a natural gas powered ethanol dehydration plant located in the Caribbean nation of Trinidad.

Under federal legislation known as the Caribbean Basin Initiative, a limited amount of ethanol can be imported from the Caribbean basin without be subject to tariffs.

Trinidad Bulk Traders is applying for three pathways. For each, its single dehydration CI is added to an existing Brazilian sugar cane CI. The resulting CI's are 78.94, 71.94 and 63.94.

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MR. INGRAM: The two slides will cover the three

proposed biodiesel pathways developed by ARB staff. ARB develops what can be called generic pathways. These are designed to incent multiple producers both in state and outside of California to enter the California market. To include the largest number of potential producers, these generic pathways are calculated using conservative assumptions. More efficient producers with lower CIs can use these generic pathway numbers until they are able to prepare a Method 2A application for the lower CI. The three staff-developed pathways recommended for approval today are two Midwestern used cooking oil biodiesel pathways and one corn oil biodiesel pathway.

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MR. INGRAM: The two proposed used cooking oil biodiesel pathways differ only in terms of the type of rendering process used. The higher energy rendering process, known as cooking, yields a higher CI, while the lower energy non-cooking process yields a lower CI. As with all the biodiesel pathways, glycerin is produced as a co-product. These pathways are similar to the existing California used cooking oil pathways. They differ in only two respects: Feedstock and fuel transportation distances and the mix of fuels used to generate electricity into two regions. Both of these factors are inputs to the GREET model that ARB uses to calculate carbon intensity values.

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MR. INGRAM: Staff are also recommending that the Executive Officer approve the pathway for the production of biodiesel from corn oil. The feedstock for this fuel pathway is produced by adding an extraction process to the final stages of the corn ethanol production process. Specifically, the corn oil is extracted from the DGS by centrifuge, although additional energy is required to heat and centrifuge the DGS, less energy is needed to dry the resulting DGS.

For dry DGS, a net energy savings is realized. For wet DGS, however, there is a net energy expenditure. The ARB corn oil pathway consists of the net energy savings or expenditure from the extraction process and the emissions associated with the biodiesel production. All other pathway emissions remain with the primary product, corn ethanol.

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MR. INGRAM: The proposed new pathways are not expected to produce any environmental or economic impacts that weren't previously considered. The Initial Statement of Reasons covering the Low Carbon Fuel Standard contains extensive chapters covering the environmental and economic impacts of the implementation of the regulation. The system boundaries established in those chapters take in

the production of the fuels included in this proposal. Consistent with that original analysis, no significant adverse impacts would occur as a result of the approval of the proposed pathways.

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MR. INGRAM: During the 45-day comment period covering the proposed pathways, POET submitted changes to two of its eleven pathways. These adjustments were made to ensure that the plants operating under those two pathways could reliably meet the pathway carbon intensities.

POET has fully documented the revisions it proposes. Based on that documentation, staff recommends that the proposed revisions be approved. In order to provide the public with an opportunity to review POET's changes, however, a supplemental 15-day public comment period is needed.

The proposed changes are relatively minor. As shown on this slide, two wet DGS pathways are affected. The raw starch hydrolysis combined heat and power pathway would increase by .2 grams of carbon dioxide equivalent per mega joule, and the raw starch hydrolysis corn fractionation pathway would decrease by .4 grams.

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MR. INGRAM: To reiterate, staff recommends that

a total of 28 new fuel pathways be approved and added to the LCFS Lookup Table and that a supplemental 15-day comment period be initiated to allow the public time to consider the pathway changes proposed by POET.

Approval of this proposed Method 2A and 2B pathways will incentivize the production of greater volumes of low carbon ethanol for the California market. Approval of the proposed staff-developed pathways will likewise incent the production of greater volumes of low carbon biodiesel for the California market.

And this concludes today's presentation.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Wes.

Before I call for public testimony, I'd like to make a quick observation. It seems to me that these submittals reflect the fact that this process, the LCFS rule, has a process to reward efficient innovative biofuel and alternative fuel producers by allowing their fuels to be assigned lower carbon intensity values. In turn, the lower CI makes these fuels more valuable to their producers, which means LCFS seems to be working as intended, which I think the staff should be very pleased with that. I think we all are.

Now I'd like to open up the public testimony. We have three witnesses who have signed up to speak. If you have not yet signed up and would like to speak, please see

the Clerk.

The first witness is Steve Unnasch from Life Cycle Associates. I don't know if I've pronounced your name right, so please correct it for the record.

MR. UNNASCH: Steven Unnasch.

EXECUTIVE OFFICER GOLDSTENE: I know you have a slide presentation. It looks to me like a 15 minute presentation, but you have three minutes. Do you want to summarize your points instead of showing the slides?

(Thereupon an overhead presentation was presented as follows.)

MR. UNNASCH: So thank you for the opportunity to talk, Mr. Goldstene.

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MR. UNNASCH: I'm here to talk about the corn oil biodiesel pathway.

We believe that ARB's approach for treating corn oil biodiesel as an incremental technology is inconsistent with other fuel pathways and inconsistent with the precedent set for life cycle analysis and international standard for life cycle assessment. Corn oil biodiesel converts oil fraction into fuel and the effects of converting the small amount of food into fuel have not been addressed and is not consistent with ARB's approach on land use conversion.

Next.

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MR. UNNASCH: Normally, in the case of corn ethanol, you would define products, co-products, and then indirect effects, which is ARB's approach for the corn ethanol pathway.

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MR. UNNASCH: Ideally, in a consequential LCA which is used by EPA and you would look at taking the corn oil out of the DGS and you would examine the effect of alternative oil supplies. This is not the approach that ARB has taken. They have taken the more attributional LCA approach and made a first order estimate of changes of DGS, for example, on the feed market. So we believe that the following approach on the -- next slide --

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MR. UNNASCH: -- will be most consistent with the method ARB has defined to treat both ethanol and biodiesel as products of the corn ethanol mill and thereby allocating the energy inputs and emissions to the ethanol and the corn oil biodiesel.

Next.

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MR. UNNASCH: So there is a number of issues with ARB's approach converting the feed into fuel. This is

taken into account. The ARB's carbon intensity creates a golden gallon where all of the benefits are added to a single gallon of fuel, which creates a lopsided or distorted incentive. For example, fractionation technologies receive the benefit only in terms of the corn ethanol plant's carbon intensity. And here the benefit is concentrated into the golden gallon.

Next slide.

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MR. UNNASCH: So we analyzed both ARB's analysis and found other than a few minor nuances that they perform the analysis as intended. However, if we follow the more conventional approach, we arrived at a carbon intensity of 70 grams per mega joule for the corn oil biodiesel and a reduction of about two grams per mega joule ethanol. We believe the ethanol and corn oil biodiesel should be sold in California to receive the full benefits of the LCFS.

Next slide.

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MR. UNNASCH: We also looked at it in terms of the total emissions for a bushel of corn. Both approaches result in about the same greenhouse gas emissions per bushel of corn. As I indicated, allocating all of the benefits to corn oil biodiesel is inconsistent with the LCA methods.

EXECUTIVE OFFICER GOLDSTENE: Why don't you keep going.

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MR. UNNASCH: Just to wrap up, we believe the ARB method is inconsistent with prior methodology. It doesn't follow the intent of ISO standards. We think that the pathways should maintain technology neutrality rather than over-incentivizing one particular technology which would create a lopsided incentive to do back-end extraction for corn oil biodiesel. And we believe that the food and fuel impacts, albeit a small fraction of the DGS, have not been taken into account. High fat DGS is very good feed. It's exported to Asia. And removing the oil from the DGS would ultimately result in shuffling soy oil, or other corn oil may need to be sprayed back onto the DGS to maintain a consistent system boundary and retain the value of the DGS.

Thank you for the time.

EXECUTIVE OFFICER GOLDSTENE: You kept saying "we," but I'm not sure who Life Cycle Associates represents or who you are.

MR. UNNASCH: Oh, well, Life Cycle Associates, we were aware of this fuel pathway when it was being developed. We talked to Dr. Stephen Muller at the University of Illinois, Chicago. And we shared some

spreadsheets, and we're -- first, the cleanest way to do it would be the way that we proposed and we looked at some of these other --

EXECUTIVE OFFICER GOLDSTENE: You just said "we" again. Who's "we"?

MR. UNNASCH: My staff and I.

EXECUTIVE OFFICER GOLDSTENE: Who are you representing? This is scientific only or do you represent --

MR. UNNASCH: This is a scientist. We're paid for our work. But --

EXECUTIVE OFFICER GOLDSTENE: That's what I'm asking.

MR. UNNASCH: We're paid by our work. But we would have done it -- we would have done it on our own initiative absent the effort to put in --

EXECUTIVE OFFICER GOLDSTENE: I'm only asking so I can have the context and understand your argument.

MR. UNNASCH: So we worked with Dr. Muller in examining these options. And then I and Dr. Muller also prepared a detailed comment letter, which we submitted.

EXECUTIVE OFFICER GOLDSTENE: Okay. I appreciate that. Before you sit down, I don't know if staff has any comments or wants to respond to some of the points that were made.

CRITERIA POLLUTANTS BRANCH CHIEF WAUGH: Yes. I'm Mike Waugh, Chief of the Criteria Pollutants Branch. And I'd like to address some of the points that were brought up.

First of all, we do believe that the corn oil extraction process and subsequent conversion to biodiesel isn't an incremental technology to be applied to existing corn ethanol plants. And we clearly state that in our supporting technical document for this pathway.

We disagree with reallocating some of the energy inputs for farming and land use change from corn ethanol to the corn oil biodiesel. We are not inconsistent with ISO, as corn oil and biodiesel is not our primary product. It is an inedible byproduct of a co-product.

And, finally, we are following the same approach that we did with the pathways in the original rulemaking, which the Board found to be scientifically sound.

Regarding the food and fuel impacts, I think when we remove the oil from the DGS, fat content is one nutritional factor which they determine the value of DGS. Their lifestocks' specific nutritional need between cattle and swine, and we state clearly in the supporting technical document if we do not intend to estimate the effects of nutritional content on the value of DGS or how that effected the market for other livestock feeds.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Mike.

In terms of our process, since this is the first time we've done this, you will respond in writing to those comments as well? Or how do we -- what's the process?

STATIONARY SOURCE DIVISION CHIEF COREY: This is Richard Corey.

The comments that are submitted will be responded to as part of the FSOR that is prepared.

EXECUTIVE OFFICER GOLDSTENE: Thank you.

MR. UNNASCH: Just one other comment. We did share our interest with other researchers and other stakeholders, and we believe that there are several comment letters along the lines of ours. Our letter was rather intense and detailed. We believe there's others that are providing similar comments. And we believe that this process -- another element of the ISO procedure is stakeholder review. And this is a rather small group of stakeholders right here. So perhaps I don't know how the process works, but it would be appropriate to review this fully with all of the effected parties.

EXECUTIVE OFFICER GOLDSTENE: I think we do have groups of people working in different parts of this. I don't know if, Rich or Bob, you want to talk about the different work groups we have going on.

Overall, the overall process -- the people

understand there are opportunities to weigh in. It's more of a general question. But I just want to make sure that Steve knows there is a lot of opportunity and that although there aren't that many people here today, we held this meeting last week with this new work group, and lots of people, think tanks to the LCFS.

STATIONARY SOURCE DIVISION CHIEF COREY: Again, Richard Corey.

Absolutely. Multiple elements of the program. Certainly, Steven can touch bases with us. Multiple opportunities to participate with respect to his point. The comments I believe are submitted in the record. Brief letter is similar to the points he's making and all of these points, whether it be both discussed here as well as responded to in the FSOR.

EXECUTIVE OFFICER GOLDSTENE: Great. Thank you very much.

DEPUTY EXECUTIVE OFFICER FLETCHER: I would just add on that a little bit.

As we proceed through the development of the fuel pathways, we are learning how to do them and are being faced with a lot of facility configurations and a lot of different challenges of how to do that. We are going to continue to evaluate how we do fuel pathways over time. We've made the decision we made on this one because we

obviously believe it's the right decision on how you deal with this particular situation.

I did want to mention that Stephen in his letter did identify a couple relatively minor technical errors or emissions he found, and we are going to address those as part of the 15-day package as well.

EXECUTIVE OFFICER GOLDSTENE: Great. Thank you.

DEPUTY EXECUTIVE OFFICER FLETCHER: We are not going to address -- we're not going to be changing the method that we use for allocation is our recommendation.

EXECUTIVE OFFICER GOLDSTENE: Okay. Thank you.

The next witness is Louie Brown.

MR. BROWN: Mr. Goldstene, members, staff, Louie Brown on behalf of the National Biodiesel Board today speaking in support of the pathway for inedible corn oil biodiesel.

I have some comments that I will provide to you, but just quickly three quick points as to our support.

First, we understand and appreciate the efforts the staff is going through. This is extremely difficult work. When it comes to issues that we're working on in California that overlap with issues working on in Washington, D.C., for example, with RFS, we appreciate when the two regulatory bodies talk to one another. And from our perspective in going through with this pathway,

that seems to have occurred. And there's consistent use and consistent methodologies followed by ARB staff as used at U.S. EPA. And we think that that outreach, that dialogue, and that consistency is something that we should continue to do and want to thank you and the staff for doing it in this one example.

Secondly, when it comes to inedible corn, it has very similar characteristics as cooking oil and other waste feedstocks. And so we think again the methodology used by the staff -- because this point is right on track.

Finally, the life cycle analysis developed by the ISO should be adopted by modelers or at least given full consideration at all points.

Again, we believe that the ISO recommends avoiding allocation of greenhouse gas emissions between co-products and using consistent approaches when possible. We again believe that the staff has done exactly what the ISO is talking about in this area. Very consistent with these international standards and, therefore, we offer our support for this pathway.

Thank you.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Mr. Brown. Thank you for coming.

Jim Lyons, who is our last witness listed.

MR. LYONS: Good afternoon, Mr. Goldstene. My

name is Jim Lyons. I'm here speaking today on behalf of POET, LLC.

POET, the largest ethanol producer in the world is the leader in efficient biorefinery and operates 26 production facilities nationwide.

POET also operates the pilot scale cellulosic plant which uses corn cobs as feedstocks and will commercialize the process is Emmetsburg, Iowa.

As we heard during the staff presentation, POET has submitted a Method 2A application for eleven different sub-pathways from Midwest corn. These pathways reflect POET's incorporation of raw starch hydrolysis and corn fractionation into the ethanol production process at facilities using renewable biomass and landfill gases fuels or combined heat and power processes. The carbon intensity values for these sub-pathways based on a dry distiller range from 74.7 to 92.4 grams of CO2 equivalent per mega joule in contrast to the 99.4 grams CO2 equivalent per mega joule for default value produced from the corn.

With wet distillers grain, the co-product CI values drops to 73.2 to 83.7 grams of per mega joule. POET urges you to approve the addition of these sub-pathways to the carbon intensity Lookup Tables.

POET also hopes to work with CARB staff on

broader and more general enhancements in the CI values assigned to ethanol produced from Midwest corn that will lower them such that they more accurately reflect life cycle emissions. These enhancements include revisions to the CI assigned for indirect land use impacts as well as others that update current assumptions regarding the source mix for Midwest electricity generation as well as those for energy, fertilizer, and pesticide use in corn farming.

Thank you very much.

EXECUTIVE OFFICER GOLDSTENE: Thank you.

Bob and Rich and Mike and Wes and John, everybody, do you have any comments about Mr. Brown or Mr. Lyons' comments?

DEPUTY EXECUTIVE OFFICER FLETCHER: We do not have any comments on that, on that testimony. We do have -- there is at least one other letter in the record that we would like to summarize for you so that you have the full scope of the comments.

EXECUTIVE OFFICER GOLDSTENE: Sure. Go ahead.

MR. WAUGH: This letter was from the Western States Petroleum Association, and they made four key points.

The first one, some applicants had submitted several sub-pathways, and they felt like by allowing

sub-pathways that we were allowing a circumvention of this substantiality of the separate CI values. Essentially, the regulation says in order to do a Method 2A, which is an improvement over an existing pathway, you have to have at least a five gram improvement over what's in the Lookup Table. And they were asserting that because there were for, say, eight different values that were crowded together that we were circumventing that five gram requirement. However, the regulation says the five gram substantiality requirement is between the Method 2A submissions and what's in the Lookup Table already. So all of this sub-pathways demonstrate this.

And there is no requirement that the sub-pathways be at least five grams from each other, if they're all over five grams from what's in the Lookup Table now.

Their second point, there is a lack of verification for modifications that do not yet exist, such as separate CI values for an optimized plant energy mode and energy savings in the future. Our response to that is that CI values for sub-pathways are conditional. They can only be used if the plant is meeting the special conditions associated with that pathway. The plant is required to periodically submit to ARB information related to its overall energy use and types and amounts of fuel used.

By considering multiple pathways, the LCFS is providing operational flexibility for the plant while incenting future improvements to reduce CIs even more.

And finally, providing CI values for processes not yet built provides a clear signal that efficient and innovative technologies will be recognized by the LCFS.

Their third point, they think that we were cherry-picking inputs to the Cal GREET model, resulting in lower CI values, for example, the use of biomass, lower carbon coal, shorter transportation distances for feedstock. For this, our response is there is no cherry-picking. The facilities have submitted facility-specific information. The regulation requires the information be well documented and scientifically defensible, which we found it to be.

And again, CI values for sub-pathways are conditionable, and the plant is required to periodically submit that to ARB.

The final point was that we use the same feed value for DOA and non-DO DTS. And I think I responded that earlier about fat content only being one part of the nutritional factor for DTS.

EXECUTIVE OFFICER GOLDSTENE: Any other comments?

Well, I don't have any ex parte communications to disclose.

And because staff suggested the 15-day changes to the proposed amendments for the two fuel pathways, I'm not going to make a decision today to approve for adoption the proposed amendments. I'll direct staff to issue as soon as possible a 15-day notice and make it publicly available so the public can comment on those. The record will be reopened once those are made public for a minimum of 15 days. And the public may submit written comments on the item as specified in the notice.

At the end of the period, the record for this agenda item will be closed again. Comments addressing items within the scope of the 15-day notice and timely received will be considered and responded to in the Final Statement of Reasons for the rulemaking.

Upon consideration of the full public record of this item, I'll make a final decision on staff's proposed amendments and issue an Executive Order accordingly.

So unless I see any other comments --

DEPUTY EXECUTIVE OFFICER FLETCHER: Just to be clear, the 15-day package would include the two POET modifications as well as the technical comments raised by Life Cycle Associates.

EXECUTIVE OFFICER GOLDSTENE: Okay. Good. Thank you.

Any other clarifying comments before I close the

record? Okay.

Well, the record for this agenda item is now closed. The February 24th, 2011, public hearing of the Executive Officer of the Air Resources Board is now adjourned. Thank you, everyone, for being here this afternoon.

(Thereupon the California Air Resources Board meeting adjourned at 2:39 p.m.)

CERTIFICATE OF REPORTER

I, TIFFANY C. KRAFT, a Certified Shorthand Reporter of the State of California, and Registered Professional Reporter, do hereby certify:

That I am a disinterested person herein; that the foregoing hearing was reported in shorthand by me, Tiffany C. Kraft, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing nor in any way interested in the outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 8th day of March, 2011.

TIFFANY C. KRAFT, CSR
Certified Shorthand Reporter
License No. 12277